

## ABSTRACT

### EFFECTS OF AVG (aminoethoxyvinilglycine) PRE-HARVEST DROP, HARVEST TIME AND FRUIT QUALITY OF 'JERSEY MAC' APPLE

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AVG is known to reduce preharvest fruit drop and increases fruit quality in some fruit species. In this study it was aimed to determine suitable AVG dosage and application for improving fruit quality of 'Jersey Mac' apple cultivar. For this reason, study was done with 13 years old 'Jersey Mac' variety trees grafted on M) rootstock in Eğirdir Fruit Research Station. 100, 125 and 150 ppm AVG dosages were applied in 3 different timings (before 30 days, 21 days and 7 days before harvest) to the fruits. Only water + surfactant (Tween 20) were applied to control treatment trees. AVG treatments delayed the harvest for 6 days and harvest was completed in for 4 days time by harvesting twice. All AVG applications reduced the pre-harvest fruit drop and increased the yield and 150 ppm AVG dosage was determined most effective dosage was determined most effective dosage for preharvest fruit drop. All AVG applications increased fruit sizes especially fruit diameter and fruit weight all quality characteristics were increased by AVG ekstra and first class fruits were determined. All AVG applications increased the fruit firmness according to control treatment. AVG treatments decreased fruits ethylene production and respiration rates. Coloration of fruits were delayed because of AVG applications and red colour of the apples were occurred minimum at 150 ppm AVG dosage which was applied 30 days before the harvest.

**Keywords:** Apple, 'Jersey Mac', AVG (aminoethoxyvinilglycine), Preharvest Fruit Drop, Quality.